

## Milk

Most milk we consume is pasteurised. This is a process where milk is heated to 75°C for 25 seconds then rapidly cooled to 5°C. This destroys most of the pathogenic bacteria. There are many different types of processed milks such as homogenised, sterilised, ultra heat treated, evaporated, condensed and dried. Each have different properties.

Many consumers choose plant based milks as an alternative to animal milks. This could be due to health benefits (reduced saturated fat content), vegetarian diets, ethical choices, intolerances or personal preferences.



## Factors affecting food choice

Some of the different factors that affect our food choice are:

- Physical activity level
- Healthy eating
- Cost of food
- Income
- Culinary skills
- Lifestyle
- Seasonality
- Availability
- Special occasions
- Religion or ethical reasons
- Intolerances or allergies.

## Low fat dairy options

Choose lower fat dairy foods in order to maintain a healthy weight. Dairy products can be high in saturated fat. To reduce fat in dairy products you could:

- Replace whole milk with skimmed or semi skimmed.
- Replace milk with a plant based alternative such as soya milk.
- Replace cream with low fat crème fraiche.
- Replace ice cream with low fat frozen yoghurt.
- Swap cheeses for reduced fat cheeses.
- Swap butter for plant based margarine.

## Cheese



**Making cheese** - A starter culture is added to fresh milk which ripens the milk allowing the lactose to be fermented into lactic acid. Rennet is then added which splits the milk into curds and whey. The curds are then pressed into moulds to remove any remaining whey where it is then left to mature for up to 24 months to turn into cheese. The longer it's left the stronger the cheese.

There are many different uses of cheese such as being eaten in its natural state on crackers, in sandwiches or salads. Added to a dish to add flavour and texture e.g. parmesan on spaghetti, mozzarella on pizza, stilton in soup.

## The nutritional value of dairy products

### Macronutrients

- Contains high biological value protein.
- Contains saturated fat. It is advised low fat dairy products are consumed.
- Contains sugary carbohydrates in the form of lactose.

### Micronutrients

- A good source of calcium.
- Contains water soluble Vitamin B.
- Contains Vitamin A and D depending on the fat levels of the product.
- May contain sodium depending on the product.

## Key vocabulary

Pathogenic bacteria	Bacteria that causes disease such as salmonella.
Pasteurisation	a process where milk is heated to 75°C for 25 seconds then rapidly cooled to 5°C. This destroys most of the pathogenic bacteria.
Rennet	An enzyme used to separate the milk into curds and whey.
Curds	A soft white substance formed when milk sours, used as the basis for cheese.
Whey	The watery part of milk that remains after the formation of curds.
Primary processing	The conversion of raw materials into food commodities e.g. milling of wheat into flour.
Secondary Processing	Converting primary processed foods into other food products, e.g. flour to bread.
Lactose intolerant	When a person is unable to digest lactose, a sugar found in milk and some other dairy products.
Food provenance	Food provenance means where your food comes from, i.e. where it is grown, raised or reared.
Emulsion	A fine dispersion of minute droplets of one liquid into another.

## Yoghurt



Yoghurt has similar nutritional values to milk and is an excellent source of HBV protein, calcium and Vitamins A, B and D. It also contains good bacteria which aids digestion. Yoghurts can come in a range of textures, fat content and flavours. Yoghurt, like other dairy products should be stored in the fridge at 5°C. Yoghurt can be used as an ingredient in dishes to give a creamy texture, a healthy alternative to cream, an alternative to mayonnaise or simply consumed as a snack.

## Key nutrients and functions

**Fat** - Protects vital organs, insulates the body, energy source, absorbs fat soluble vitamins A,D,E,K.

**Protein** - Builds and repairs cells.

**Carbohydrate** - main source of energy and NSP (wholegrain varieties).

**Vitamins:** **A**-Healthy eye sight, **B** - energy release, **C** - immune system, **D** -helps strengthen bones and teeth.

**Minerals:** **Iron** - healthy red blood cells, **calcium** - strong bones and teeth, **sodium** -regulates water in cells .